

The National Specialties Company, Fort Wayne, Indiana

# SUPER-INDUSTRIAL



## 110 VOLT ELECTRIC SOLDERING IRONS

### EMBODY THE LATEST FEATURES OF CONSTRUCTION

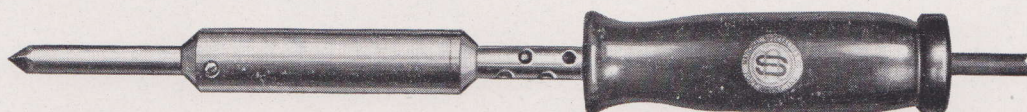
**INCLUDING:** Corrosion resistant metals in all exposed and working parts, Armored tip which provides many times the life and efficiency of the ordinary copper tip—Improved concentrated winding in the heating element, concentrating heat in the tip end of the chamber—Remarkably cool handle.

Super tips do not corrode or “freeze” in the heat chamber—They can be removed easily at any time. Armored feature on tip is “Patent Applied For”.

Chromel — A Resistance used in heating elements.

All tools fitted with 6 ft. No. 18, G. E. Super-Service Unicord.

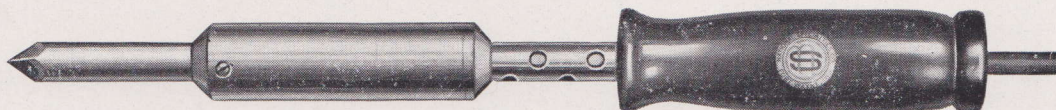
### EVERY TOOL GUARANTEED TO GIVE SATISFACTION



Heat Chamber Dia.  $\frac{7}{8}$ "

No. 6

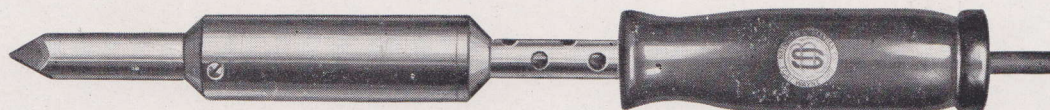
100 Watts .....\$6.00



Heat Chamber Dia. 1"

No. 7

150 Watts .....\$7.00

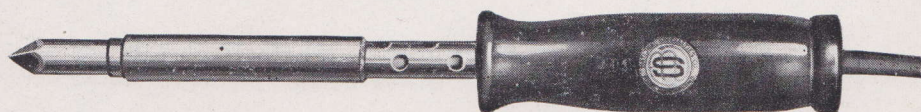


Heat Chamber 1  $\frac{1}{8}$ "

No. 8

200 Watts .....\$8.00

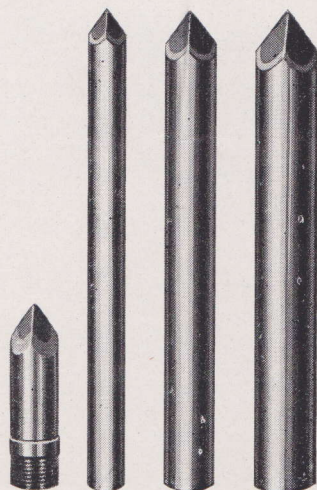
The No. 6, 7 and 8 irons shown above are the inserted tip type and supply adequate heat for any continuous production operation within their range. The No. 5 iron shown below has a screw tip. Small chamber diameter of this tool allows work to be done where space is limited. Element construction is resistance wound on Alsimag core. This is a very desirable tool for light, intermittent soldering operations.



Heat Chamber Dia.  $\frac{5}{8}$ "

No. 5

125 Watts .....\$4.50



No. 5 No. 6 No. 7 No. 8

#### EXTRA TIPS

No.	Dia.	Length	Price
5	$\frac{1}{2}$ "	2"	\$1.00
6	$\frac{3}{8}$ "	5"	\$1.40
7	$\frac{1}{2}$ "	5"	\$1.60
8	$\frac{5}{8}$ "	5"	\$1.80

#### HEATING ELEMENTS

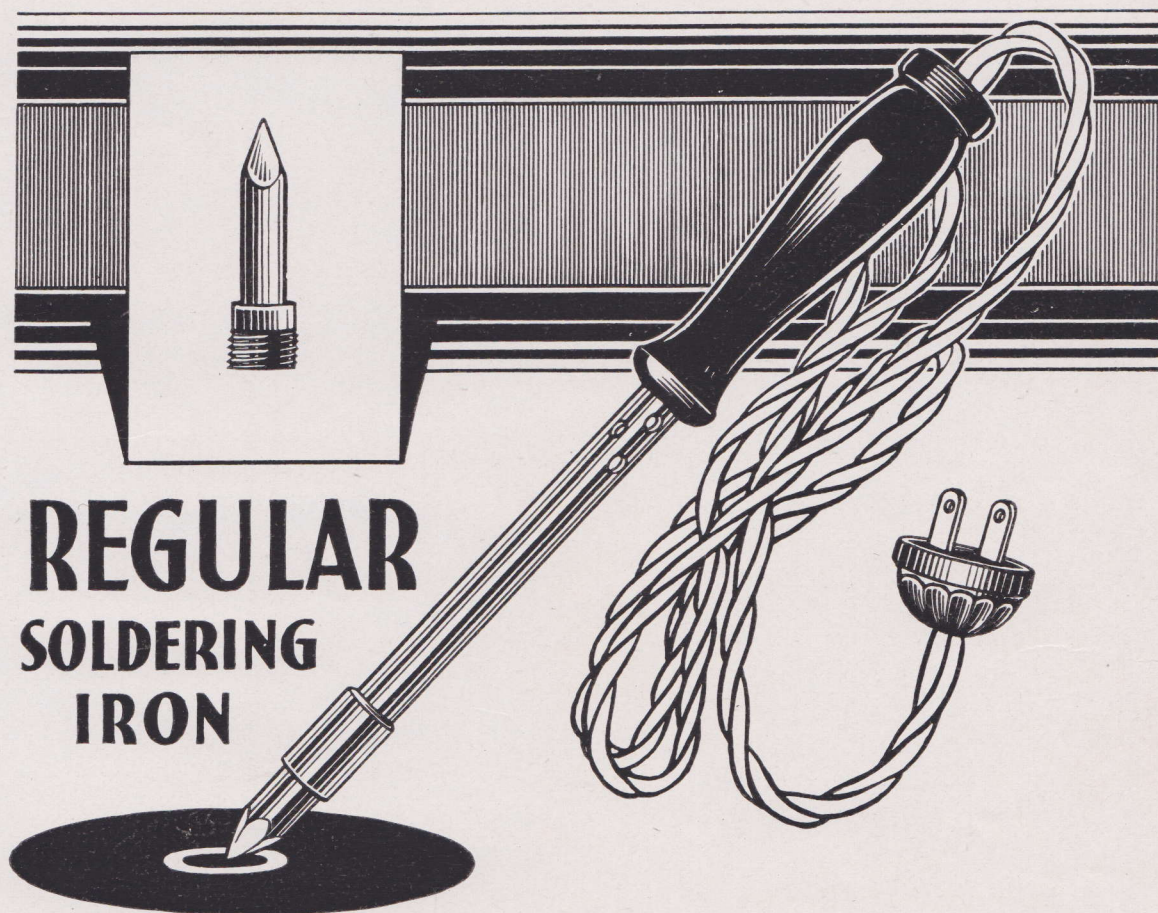
No.	Price
5	\$1.00
6	\$3.00
7	\$3.50
8	\$4.00







The National Specialties Company, Fort Wayne, Indiana



## REGULAR SOLDERING IRON

**No. 280**

EMBODIES ALL FEATURES OF THE "REGULAR" LINE, INCLUDING HIGH GRADE HEATING ELEMENT, VENTILATED HANDLE TUBE AND PURE MICA AND ABSESTOS INSULATION.

### SPECIFICATIONS

HEATING ELEMENT — 110 Volt, 55 Watt. Made from Chromel A resistance wire wound on lava core. Long life. Guaranteed for one year.

HEAT CHAMBER — Brass,  $\frac{5}{8}$ " diameter. Insures rapid transmission of heat to tip.

HANDLE TUBE — Steel, ventilated. Prevents transmission of heat to handle.

HANDLE — Highly finished black Hard wood.

CORD — 5 ft. Underwriters approved No. 18 black twisted pair lamp cord, fitted with plug cap only.

TIP — Two tips are furnished with this iron. One Tip is  $\frac{1}{2}$ " diameter,  $1\frac{1}{4}$ " long and the other is  $\frac{3}{8}$ " diameter with length of  $1\frac{3}{4}$ ". The  $\frac{1}{2}$ " tip takes in the heavier jobs while the  $\frac{3}{8}$ " tip, being smaller and longer, takes in the lighter jobs and permits work to be done in places where space is limited.

**HERE IS REAL VALUE AT A REAL PRICE**

**PRICE No. 280 Iron with Two Tips, \$1.00**

Standard Packages of One Dozen and Three Dozen. Shipping weight  $7\frac{1}{2}$  pounds per dozen.







## The National Specialties Co., Fort Wayne, Indiana

### "REGULAR" POPULAR PRICED ELECTRIC SOLDERING IRONS

110 Volt Element—Guaranteed for One Year

Can Be Used on Either A. C. or D. C. Current, 105 to 115 Volts

#### SPECIAL FEATURES

The heating element in all "Regular" irons is manufactured in our own factory and is made from Chromel-A resistance wire wound on lava core, with heavy Chromel leads extending through the core, beyond the range of incessant heat, thus preventing corrosion or burning off the leads. Performance record of this construction remains unsurpassed.

Element leads are firmly soldered to cord which is anchored in fibre connecting block, thus eliminating strain on the joint. Lead insulation dielectric test, 25,000 volts.

Heavy element chamber functions as reservoir of surplus heat and medium for the rapid transmission of heat to the copper tip.

These features as well as the ventilated steel tube, which prevents transmission of heat to the handle are embodied in all sizes of "Regular" irons.

NOTE: Only pure sheet mica and asbestos used in insulation.

#### No. 49



No. 49. Consumes 55 Watts. Designed especially for radio and household use. Polished brass element chamber, lacquered. Five feet No. 18 cord. Two piece attachment plug.

Standard with  $\frac{3}{8}$ " diamond shaped screw tip,  $\frac{1}{2}$ " tip furnished if desired. Screw driver tip optional.

Price No. 49 Iron ..... \$1.50

Extra Tips, each ..... .30

#### No. 56

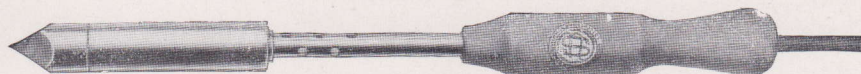


No. 56. Consumes 70 Watts. Designed for telephone, switchboard, radio and light industrial purposes. Polished brass element chamber lacquered. Six feet No. 18 heater cord. Two piece attachment plug. Standard with  $\frac{1}{2}$ " diamond shaped screw tip,  $\frac{3}{8}$ " tip furnished if desired. Screw driver tip optional.

Price No. 56 Iron ..... \$3.25

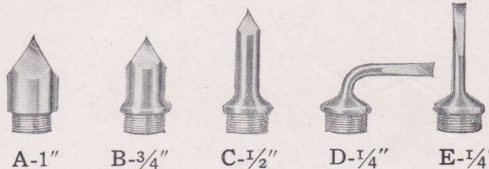
Extra Tips, each ..... .30

#### No. 145



No. 145. Consumes 200 Watts. Designed for heavy duty in manufacturing plants and garages. Heavy one-piece steel element chamber, heavily nickel plated and highly polished. Six feet No. 18 heater cord. Two piece attachment plug. Standard with 1" copper screw tip.

#### No. 145 Tips



Five different styles and sizes of tips can be furnished for this number. Tips No. 145D and 145E are ideal for automobile radiator work.

Price No. 145 Iron ..... \$6.50

Extra Tips, each ..... 1.00

Price per set of any four ..... 3.50



The National Geographic Society

# REGULAR MONTHLY ELECTRIC BATTERIES

For the purpose of making a battery of the type described in this paper, the following materials are required:

## NECESSARY MATERIALS

The battery described in this paper is a simple one, and is made of the following materials: zinc, copper, and dilute sulphuric acid. The zinc and copper are obtained from the local market, and the acid is made by dissolving sulphuric acid in water. The battery is made by connecting the zinc and copper plates in a series, and immersing them in the acid. The current is then drawn off from the battery by means of a wire.

## PREPARATION OF THE BATTERY

The battery is prepared by first cleaning the zinc and copper plates with a solution of caustic soda. The acid is then added, and the battery is allowed to stand for a few days before use.

## USE OF THE BATTERY

The battery is used for the purpose of making a current of electricity, which can be used for a variety of purposes, such as for the purpose of lighting a lamp, or for the purpose of running a small motor.

## CONSTRUCTION OF THE BATTERY

The battery is constructed by first cleaning the zinc and copper plates with a solution of caustic soda. The acid is then added, and the battery is allowed to stand for a few days before use.

## USE OF THE BATTERY

The battery is used for the purpose of making a current of electricity, which can be used for a variety of purposes, such as for the purpose of lighting a lamp, or for the purpose of running a small motor.

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